Table B-35. Federal science and engineering (S&E) obligations to federally funded research and development centers administered by universities and colleges, by type of activity: fiscal years 1963-95

Page 1 of 1

							i age i oi i
Fiscal year	Total	Research and devel- opment	R&D plant ¹	Facilities for in- struction in S&E	Fellow- ships, trainee- ships, and training grants	General support for S&E	Other S&E activities
1963 1964 1965 1966 1967	814,082 862,353 895,287 917,631 907,549	668,803 732,345 744,172 784,227 800,798	138,880 122,508 141,714 127,604 101,753	(2) (3) (3) (4) (2)	(4) (4) (4) (4)	(9) (9) (9) (9)	6,399 7,500 9,401 5,800 4,998
1968 1969 1970 1971 1972	935,820 916,872 960,906 976,313 1,067,343	818,035 790,981 799,670 787,186 927,278	113,779 121,135 156,794 184,709 133,318	ල ල ල 53 0	(²) (²) (²) 1,481 2,740	ල ල 70 0	4,006 4,756 4,442 2,814 4,007
1973 1974 1975 1976	1,005,764 1,071,203 1,196,768 1,433,618 1,600,593	904,413 962,203 1,067,283 1,268,144 1,442,656	95,521 102,105 128,772 163,038 157,508	45 0 0 0 0	2,944 664 351 493 306	48 206 211 0 123	2,793 6,025 151 1,943 0
1978 1979 1980 1981 1982	1,665,824 1,916,109 2,143,749 2,204,317 2,462,966	1,451,994 1,584,961 1,733,234 1,871,759 2,047,178	213,180 330,613 379,943 322,137 406,211	0 0 12,525 6,647 6,115	458 402 527 298 293	106 133 9,955 2,270 400	86 0 7,565 1,206 2,769
1983 1984 1985 1986 1987	2,741,693 3,006,001 3,448,931 3,520,597 3,640,083	2,374,303 2,638,926 3,017,501 3,167,947 3,262,297	337,350 358,265 427,122 348,705 373,474	17,757 1,605 1,460 0 902	437 344 683 1,019 577	11,130 584 1,921 1,285 1,532	716 6,277 244 1,641 1,301
1988 1989 1990 1991 1992	3,766,126 4,019,518 4,146,704 4,300,781 4,443,605	3,300,725 3,525,564 3,593,472 3,615,171 3,843,466	462,089 459,724 473,314 615,760 598,946	450 1,095 0 4,570	544 628 857 4,635 813	687 764 24,009 206 235	1,631 31,743 55,052 60,439 145
1993 1994 1995	4,318,645 4,059,881 4,190,940	3,627,427 3,351,938 3,647,086	620,724 660,871 511,780	33,359 0 2,351	109 301 332	80 36,448 22,528	36,946 10,323 6,863

See Technical Notes, "Scope of Survey."

Not separately identified but included under "Other science and engineering activities."

Table B-36. Federal science and engineering obligations to federally funded research and development centers administered by universities and colleges, by agency: fiscal years 1963-95

[Thousands of dollars]

Page 1 of 1

Fiscal year	Total	USDA	Com	DoD	ED	DOE 1	EPA	HHS ²	HUD	Int	Labor	NASA	NSF	NRC	DOT
1963 1964 1965 1966 1967	814,082 862,353 895,287 917,631 907,549	0 0 0 0	0 0 0 0	142,676	0 0 0 0	440,259 471,470 485,028 517,898 510,878	0 0 0 0	0 509 1,788 3,225 7,859	0 0 0 0	0 0 0 0	NA NA NA NA	230,168 226,194 245,094 230,820 223,984	15,419 20,136 20,701 23,772 28,836	0 0 0 0	0 0 0 0
1968 1969 1970 1971 1972	935,820 916,872 960,906 976,313 1,067,343	0 0 0 0	45 57 92 0	131,213 129,398	0 0 0 0	539,513 560,752 613,251 626,621 609,031	0 0 0 0	12,455 23,658 7,932 7,427 9,478	0 0 0 550 0	0 0 0 0	0 0 0 0	209,732 160,619 180,692 175,077 211,295	31,227 28,421 27,506 37,240 41,811	0 0 0 0	1 NA 220 0 6,079
1973 1974 1975 1976	1,005,764 1,071,203 1,196,768 1,433,618 1,600,593	0 0 0 0	0 0 73 0 0	186,168 207,323	0 0 0 0	595,815 633,667 721,906 906,173 1,067,072	88 0 0 0	1,171 3,151 3,280 6,170 6,622	0 0 0 0	0 261 213 674 0	0 0 0 0	203,860 212,065 227,512 241,928 235,714	46,386 57,032 57,562 71,325 72,317	0 0 0 0	3,221 1,037 54 25 878
1978 1979 1980 1981 1982	1,665,824 1,916,109 2,143,749 2,204,317 2,462,966	0 0 0 82 0	0 0 0 0 1,545	111,728 134,070	0 0 0 0	1,442,694 1,608,105 1,654,224	0 0 0 0 393	8,771 11,556 11,955 16,099 19,087	0 0 0 0	0 294 300 285 0	0 0 0 0	224,121 264,610 312,866 318,820 331,938	78,489 85,227 73,153 73,240 72,702	50 0 0 0	2,544 0 3,300 3,800 3,826
1983 1984 1985 1986 1987	2,741,693 3,006,001 3,448,931 3,520,597 3,640,083	65 120 55 165 210	271 333	249,558 322,060 322,357	0 0 0 0	2,083,262 2,259,839 2,172,387	2 0 0 0	20,543 20,562 25,854 26,404 30,586	0 0 0 0	0 30 0 0	0 0 0 0	427,526 548,307 724,813 891,284 878,564	83,440 91,464 103,438 99,529 102,973	0 0 0 0 150	5,991 12,427 12,539 7,475 9,464
1988 1989 1990 1991 1992	3,766,126 4,019,518 4,146,704 4,300,781 4,443,605	0 493 0 0 195	801 644 1,006	411,276	0 0 0 0	2,550,385 2,608,062 2,677,263	0 0 0 145 19	27,944 29,203 30,428 29,651 28,165	0 0 0 0	0 0 0 0	0 0 0 0	846,091 929,125 950,199 986,635 1,050,818	98,905 104,112 120,251 194,805 135,852	50 0 0 0	55 100 0 0
1993 1994 1995	4,318,645 4,059,881 4,190,940	25 0 0	426 426 758		0 0 0	2,736,497	0 88 0	25,224 27,179 23,538	0 0 0	0 140 610	0 0 0	840,791 813,393 1,053,935	143,191 150,966 190,378	0 0 0	1,000 111 15,949

Data shown for fiscal years 1963-74 and fiscal years 1975-77 represent obligations of the Atomic Energy Commission and the Energy Research and Development Administration, respectively.

KEY: USDA = U.S. Department of Agriculture

Com = Department of Commerce DoD = Department of Defense DOD = Department of Detense
ED = Department of Education
DOE = Department of Energy
EPA = Environmental Protection Agency
HHS = Department of Health and Human Services
HUD = Department of Housing and Urban Development
Int = Department of the Interior

Labor = Department of Labor
NASA = National Aeronautics and Space Administration
NSF = National Science Foundation
NRC = Nuclear Regulatory Commission
DOT = Department of Transportation
NA = Not available

Data shown for fiscal years 1963-79 represent obligations of the Department of Health, Education, and Welfare.

Table B-37. Federal science and engineering (S&E) obligations to federally funded research and development centers administered by universities and colleges, by agency and type of activity: fiscal year 1995

Page 1 of 1

							- 3 -
Agency	Total	Research and devel- opment	R&D plant ¹	Facilities for in- struction in S&E	Fellow- ships, trainee- ships, and training grants	General support for S&E	Other S&E activities
Total, all agencies	4,190,940	3,647,086	511,780	2,351	332	22,528	6,863
Department of Commerce	758	223	0	0	0	0	535
Department of Defense, total	350,315	350,201	0	0	0	0	114
Department of the Army Department of the Navy Department of the Air Force	314 2,997 347,004	200 2,997 347,004	0 0 0	0 0 0	0 0 0	0 0 0	114 0 0
Department of Energy	2,555,457	2,091,242	433,596	2,351	0	22,092	6,176
Department of Health & Human Services, total	23,538	23,130	0	0	332	38	38
Centers for Disease Control & Prevention	237 23,301	237 22,893	0	0	0 332	0 38	0 38
Department of the Interior	610	240	370	0	0	0	0
Department of Transportation	15,949	15,949	0	0	0	0	0
National Aeronautics & Space Administration	1,053,935	1,031,070	22,865	0	0	0	0
National Science Foundation	190,378	135,031	54,949	0	0	398	0

See Technical Notes, "Scope of Survey."

Table B-38. Federal science and engineering obligations to federally funded research and development centers (FFRDCs) administered by universities and colleges, by State, institution, and sponsoring agency: fiscal years 1988-95

Page 1 of 2 State, institution, and sponsoring agency 1988 1989 1990 1991 1992 1993 1994 1995 United States, total 3,766,126 4,019,518 4,146,704 4,300,781 4,443,605 4,318,645 4,059,881 Arizona: National Optical Astronomy Observatories 1 (National Science Foundation) 23,005 24,028 29,139 29,511 28,510 41,615 45,284 70,099 California: Ernest Orlando Lawrence Berkeley National Laboratory 185,313 189,101 196,715 220,271 166.446 202.859 204,066 231,839 (Department of Energy) Jet Propulsion Laboratory² (National Aeronautics & Space Admin) 846,556 929,423 950,419 986,914 1,050,806 840,918 813,744 1,054,571 Lawrence Livermore National Laboratory (Department of Energy) ... 743,566 629,003 715,968 754,198 718,478 703,580 563,322 510,680 Stanford Linear Accelerator Center (Department of Energy) 122,790 136,049 144,080 142,710 148,334 160,977 174,767 168,818 Colorado: National Center for Atmospheric Research (National Science Foundation) 46,052 48,197 49,198 53,889 58,767 61,971 64,551 79,638 Argonne National Laboratory 225,453 248,750 320,857 357,584 383,131 413,069 378,108 348,056 (Department of Energy) Fermi National Accelerator Laboratory (Department of Energy) 190,822 202,504 199,219 212,090 226,193 226,141 229,018 251,143 lowa: Ames Laboratory (Department of Energy) 20,645 20,290 22,855 29,916 29,608 28,670 25,169 24,491 Massachusetts: Lincoln Laboratory (Department of Defense/Air Force) 367.570 379.002 407,100 376,209 373.805 343.913 294,947 314,609 New Jersey: Princeton Plasma Physics Laboratory (Department of Energy) 102,183 97,641 92,441 90,311 116,853 111,543 103,754 118,184 New Mexico: Los Alamos National Laboratory 600.189 621.722 621.028 555.967 598.011 670.200 574,896 535.753 (Department of Energy) New York: **Brookhaven National Laboratory** 219,915 256 059 229 490 255,218 303 594 324,251 331,467 318 029 (Department of Energy) Pennsylvania: Software Engineering Institute (Department of Defense/Defense Advanced Research Projects Agency) 0 23,330 28,500 31,565 34,951 32,334 32,786 31,582 Tennessee: Oak Ridge Institute for Science & Education (Department of Energy) 18,762 131,482 24,171 30,962 38,862 46,805 95,992 25,606

See explanatory information, if any, and SOURCE at end of table.

Table B-38. Federal science and engineering obligations to federally funded research and development centers (FFRDCs) administered by universities and colleges, by State, institution, and sponsoring agency: fiscal years 1988-95

[Thousands of dollars]

Page 2 of 2 1988 1992 1993 State, institution, and sponsoring agency 1989 1990 1991 1994 1995 Texas: Institute for Advanced Technology³ 0 O 1,000 1,889 6,481 0 0 0 (Department of Defense/Army) Virginia: Thomas Jefferson National Accelerator Facility⁴ 81.475 (Department of Energy) 43 720 55.967 84.565 77.297 69.880 72.452 70.576 West Virginia: National Radio Astronomy Observatory 28,452 30,758 34,485 102,052 35,315 29,246 29,218 29,597 (National Science Foundation) Puerto Rico: National Astronomy & Ionosphere Center⁵ (National Science Foundation) 0 6,178 8,516 11,750 9,466 10,135 7,669

NOTE: University consortia, as well as individual universities and colleges, administer FFRDCs. Refer to Section A, Technical Notes, "Federally Funded Research and Development Centers" for a list of FFRDCs by agency and administering institution.

Since February 1984 this center has included three former FFRDCs: Cerro Tololo Inter-American Observatory, Kitt Peak National Observatory, and the National Solar Observatory (formerly Sacramento Peak Observatory).

² Obligations reported to the Jet Propulsion Laboratory include sizable amounts that are subcontracted, principally to industrial firms.

³ The Department of the Army decertified the Institute for Advanced Technology (University of Texas), Austin, TX, as an FFRDC in November 1993.

⁴ In May 1996 the name was changed from Continuous Electron Beam Accelerator Facility.

Data for the National Astronomy & Ionosphere Center were included with the totals reported to the center's sponsor, Cornell University, in fiscal years 1988 and 1989.

Table B-39. Federal science and engineering (S&E) obligations to federally funded research and development centers (FFRDCs) administered by universities and colleges, by State, institution, agency, and type of activity: fiscal year 1995

Page 1 of 3

							i age i oi o
State, institution, administering institution, and agency providing funds	Total	Research and devel- opment	R&D plant ¹	Facilities for in- struction in S&E	Fellow- ships, trainee- ships, and training grants	General support for S&E	Other S&E activities
United States, total:							
Total	4,190,940	3,647,086	511,780	2,351	332	22,528	6,863
Dept of Commerce Dept of Defense Dept of Energy Dept of Health & Human Services	758 350,315 2,555,457 23,538	223 350,201 2,091,242 23,130	0 0 433,596 0	0 0 2,351 0	0 0 0 332	0 0 22,092 38	535 114 6,176 38
Dept of the Interior Nat'l Aeronautics & Space Admin Nat'l Science Foundation Other agencies	610 1,053,935 190,378 15,949	240 1,031,070 135,031 15,949	370 22,865 54,949 0	0 0 0 0	0 0 0 0	0 0 398 0	0 0 0 0
Arizona:							
Nat'l Optical Astronomy Observatories ² (Assoc of Univ for Rsch in Astronomy, Inc.)							
Total	70,099 70,099	29,099 29,099	41,000 41,000	0	0 0	0	0
California:							
Ernest Orlando Lawrence Berkeley National Lab (University of California)							
Total Dept of Commerce	231,839 89	174,707 75	55,113 0	110 0	278 0	1,491 0	140 14
Dept of Defense	2.117	2,003 159,888	Ö	0 110	0	Ö	114
Dept of Energy Dept of Health & Human Services Nat'l Science Foundation	216,590 12,925 118	12,623 118	55,113 0 0	0	278 0	1,479 12 0	12 0
Jet Propulsion Laboratory ³ (California Institute of Technology)							
Total Dept of Commerce	1,054,571	1,031,706	22,865 0	0	0	0	0
Dept of Defense	572	572	Ö	0	Ō	0	0
Nat'l Aeronautics & Space Admin Nat'l Science Foundation	1,053,935 60	1,031,070 60	22,865 0	0 0	0 0	0 0	0 0
Lawrence Livermore National Laboratory (University of California)							
Total		482,027	18,976	345	0	9,325	7
Dept of Commerce Dept of Defense		0 1,386	0	0	0	0	7 0
Dept of Energy Dept of the Interior	508,613 160	480,365 160	18,976 0	345 0	0 0	8,927 0	0 0
Nat'l Science Foundation	514	116	0	0	0	398	0
Stanford Linear Accelerator Center (Leland Stanford Junior University)							
Total Dept of Energy	168,818 168,818	117,713 117,713	51,105 51,105	0 0	0 0	0	0
Colorado:							
Nat'l Center for Atmospheric Research (Univ Corp for Atmospheric Research)							
Total Dept of Defense	79,638 85	65,689 85	13,949	0	0	0	0
Nat'l Science Foundation	79,553	65,604	13,949	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table B-39. Federal science and engineering (S&E) obligations to federally funded research and development centers (FFRDCs) administered by universities and colleges, by State, institution, agency, and type of activity: fiscal year 1995

							Page 2 of 3
State, institution, administering institution, and agency providing funds	Total	Research and devel- opment	R&D plant ¹	Facilities for in- struction in S&E	Fellow- ships, trainee- ships, and training grants	General support for S&E	Other S&E activities
Illinois:							
Argonne National Laboratory (University of Chicago)							
Total Dept of Commerce Dept of Energy Dept of Health & Human Services Dept of the Interior	348,056 81 347,014 881 80	252,074 4 251,109 881 80	88,575 0 88,575 0 0	1,288 0 1,288 0	0 0 0 0	6,042 0 6,042 0 0	77 77 0 0 0
Fermi National Accelerator Laboratory (Universities Research Assoc, Inc.)							
Total Dept of Energy	251,143 251,143	170,917 170,917	80,226 80,226	0	0	0	0
Ames Laboratory (Iowa State Univ of Science & Tech)							
Total Dept of Energy Dept of Health & Human Services	24,491 23,965 526	21,845 21,319 526	2,646 2,646 0	0 0 0	0 0 0	0 0 0	0 0 0
Massachusetts:							
Lincoln Laboratory (Massachusetts Inst of Technology)							
Total Dept of Defense Dept of the Interior	314,609 314,239 370	314,239 314,239 0	370 0 370	0 0 0	0 0 0	0 0 0	0 0 0
New Jersey:							
Princeton Plasma Physics Laboratory (Princeton University)							
Total Dept of Energy Nat'l Science Foundation	118,184 118,078 106	115,284 115,178 106	2,900 2,900 0	0 0 0	0 0 0	0 0 0	0 0 0
New Mexico:							
Los Alamos National Laboratory (University of California)							
Total Dept of Commerce Dept of Energy Dept of Health & Human Services Nat'l Science Foundation Other agencies	535,753 37 512,996 5,609 1,162 15,949	523,196 0 500,530 5,555 1,162 15,949	11,079 0 11,079 0 0	523 0 523 0 0	54 0 0 54 0	864 0 864 0 0	37 37 0 0 0
New York:							
Brookhaven National Laboratory (Associated Universities, Inc.)							
Total Dept of Commerce Dept of Energy Dept of Health & Human Services Nat'l Science Foundation	318,029 140 313,610 2,831 1,448	203,535 140 199,168 2,779 1,448	109,577 0 109,577 0 0	85 0 85 0	0 0 0 0	4,806 0 4,780 26 0	26 0 0 26 0
Pennsylvania:							
Software Engineering Institute (Carnegie Mellon University)							
Total Dept of Defense	31,582 31,582	31,582 31,582	0 0	0	0 0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table B-39. Federal science and engineering (S&E) obligations to federally funded research and development centers (FFRDCs) administered by universities and colleges, by State, institution, agency, and type of activity: fiscal year 1995

[Thousands of dollars]

Page 3 of 3

State, institution, administering institution, and agency providing funds	Total	Research and devel- opment	R&D plant ¹	Facilities for in- struction in S&E	Fellow- ships, trainee- ships, and training grants	General support for S&E	Other S&E activities
Tennessee:							
Oak Ridge Institute for Science & Education (Oak Ridge Assoc Universities, Inc.)							
Total Dept of Commerce Dept of Defense Dept of Energy Dept of Health & Human Services	25,606 400 334 24,054 766	17,176 0 334 16,024 766	1,854 0 0 1,854 0	0 0 0 0	0 0 0 0	0 0 0 0	6,576 400 0 6,176
Nat'l Science Foundation	52	52	0	0	0	0	0
Virginia:							
Thomas Jefferson Nat'l Accelerator Facility ⁴ (Southeastern Univ Research Assoc, Inc.)							
Total Dept of Energy	70,576 70,576	59,031 59,031	11,545 11,545	0	0 0	0	0
West Virginia:							
National Radio Astronomy Observatory (Associated Universities, Inc.)							
Total Nat'l Science Foundation	29,597 29,597	29,597 29,597	0 0	0	0	0	0
Puerto Rico:							
National Astronomy & Ionosphere Center ⁵ (Cornell University)							
Total Nat'l Science Foundation	7,669 7,669	7,669 7,669	0	0	0 0	0	0 0

See Technical Notes, "Scope of Survey."

NOTE: University consortia, as well as individual universities and colleges, administer FFRDCs. Refer to Section A, Technical Notes, "Federally Funded Research and Development Centers" for a list of FFRDCs by agency and administering institution.

Since February 1984 this center has included three former FFRDCs: Cerro Tololo Inter-American Observatory, Kitt Peak National Observatory and the National Solar Observatory (formerly Sacramento Peak Observatory).

³ Obligations reported to the Jet Propulsion Laboratory include sizable amounts that are subcontracted, principally to industrial firms.

In May 1996 the name was changed from Continuous Electron Beam Accelerator Facility.

Data for the National Astronomy & Ionosphere Center were included with the totals reported to the center's sponsor, Cornell University, in fiscal years 1988 and 1989.

Table B-40. Federal science and engineering research and development and R&D plant obligations to federally funded research and development centers (FFRDCs) administered by nonprofit institutions, by State, institution, and sponsoring agency: fiscal years 1988-95

Page 1 of 1 State, institution, and sponsoring agency 1988 1989 1990 1991 1992 1993 1994 1995 United States, total 1,014,106 1,024,275 1,321,315 815,064 746,792 784,734 829,476 1,035,651 California: Aerospace Federally Funded Rsch & Development Ctr 367,916 304,811 416,668 397,271 255,942 303,487 99,166 252,347 (Department of Defense/Air Force) (Department of Defense/Army) 4,300 16,700 19,600 25,500 0 23,536 0 0 National Defense Research Institute 1 (Department of Defense, Office of the Secretary) 24,100 26,400 28,600 0 25,790 0 6,852 20,304 Project Air Force¹ (Department of Defense/Air Force) 19,220 24,874 23,372 Ω 22,488 23,980 24,000 24,000 National Renewable Energy Laboratory² (Department of Energy) 54,417 52,152 69,611 104,013 139,681 189,909 207,547 242,900 New Mexico: Inhalation Toxicology Research Institute³ 0 9,400 8,051 8,583 8,881 8,433 7,890 (Department of Energy) 6.845 C3I Federally Funded Research & Development Ctr4 (Department of Defense/ Office of the Secretary) 334,605 367,617 445,729 17,838 3,394 5,458 186,364 175,879 Center for Advanced Aviation System Development⁴ (Department of Transportation) 0 0 0 0 17,542 5,658 13,327 8,888 Center for Naval Analyses (Department of Defense/Navy) 34,799 41,200 48,558 0 0 0 37.960 549 Institute for Defense Analyses Studies & Analyses (Department of Defense/ Office of the Secretary) 83,700 75,458 77,590 90,200 73,468 68,840 23,137 55,360 Logistics Management Institute⁵ (Department of Defense/ Office of the Secretary) 17,400 18,600 26,696 31,279 19,603 60,776 13,700 33,324 Washington: Pacific Northwest National Laboratory (Department of Energy) 83,522 149,419 205,069 195,646 163,405 67,898 153,784 138,637

The following portions of the RAND Corp. are FFRDCs: National Defense Research Institute (formerly Defense/Office of the Joint Chiefs of Staff), Project Air Force, the Arroyo Center, and the Critical Technologies Institute. All other agency support to RAND is reported under nonprofit institutions.

² In September 1991 the name was changed from Solar Energy Research Institute.

³ The Department of Energy removed the Inhalation Toxicology Research Institute from the Master Government List of FFRDCs in May 1996.

Only the C3I Federally Funded Research & Development Center and the Center for Advanced Aviation System Development parts of the MITRE Corp. are FFRDCs. All other agency support to MITRE is reported under nonprofit institutions.

Logistics Management Institute moved from Bethesda, MD, to McLean, VA, in May 1994.